

in male equaling the length of the insect, not quite so long in female, reddish brown. Prothorax less than a fourth wider than long, with straight sides narrowing slightly toward basal sulcus, basal sulcus well marked, disk covered with moderately dense and distinct punctures. Scutellum pale. Elytra entirely pale, basal callosity well marked, elytral striae becoming very faint and indistinct at apex and on sides. Body beneath pale in all but one of the four specimens, in that one the abdomen deep reddish brown, very sparsely pubescent, shining. Length 2–2.2 mm; width 0.8–1 mm.

*Type* male and 3 paratypes, Mus. Comp. Zool. No. 26924. One paratype in National collection, U.S.N.M. 57230.

*Type locality*.—Mountains north of Imias, 3,000–4,000 feet altitude, eastern Oriente Province, Cuba, collected July 25–28, 1936, by P. J. Darlington.

This species is well distinguished by the unusually long antennae, which in the male equal the length of its body; in the female they are not quite so long. In addition, it is smaller than the two other species described here from Cuba, and the punctuation is less marked at the apex.

***Pseudoepitrix darlingtoni*, n. sp.**

Fig. 2

About 2.5 mm long, shining, yellow-brown, with the head sometimes reddish brown, elytral striation visible to the apex.

Head with interocular space a little more than half its width, the front not so long as in

*P. tetraspilota*, frontal tubercles not very distinct, bounded behind by a depressed line extending to fovea by the eye; occiput alutaceous and finely punctate. Antennae pale, deepening in color to apex, extending a little beyond the middle of the elytra, fifth joint longest. Prothorax about a third wider than long with almost straight sides, narrowing slightly toward base, basal sulcus well marked, surface moderately densely and distinctly punctate. Scutellum pale. Elytra with callosity at base and a deep incurving intrahumeral depression running down around it; elytral striation stronger at base but visible to the apex; color entirely yellow brown. Body beneath entirely pale, shiny, very sparsely pubescent. Length 2.2–2.4 mm; width 1–1.1 mm.

*Type* male, Mus. Comp. Zool. 26923, and three paratypes, two of which, a male and female, in the National collection, U.S.N.M. 57231.

*Type locality*.—Pico Turquino, 3,000–6,000 feet altitude, Cuba, collected in June 1936 by P. J. Darlington.

This is a paler species than *P. tetraspilota* and without markings. The aedeagus is also more pointed. The thorax is more coarsely punctate than in *P. hispaniolae* Blake, and the aedeagus is distinguishable from those of *P. hoffmani* Bryant, *P. jamaicensis* Blake, and *P. hispaniolae*. All these species of *Pseudoepitrix* are very closely related, but those on each island appear distinct. In Cuba alone three species have been collected.

**ZOOLOGY.—*New urocoptid mollusks from Mexico*.<sup>1</sup> PAUL BARTSCH, U. S. National Museum.**

The United States National Museum recently received two collections of mollusks from Mexico representing several new species of the family Urocoptidae. One of these collections was made at Teotitlán del Camino, Oaxaca, by the indefatigable collector Miss Marie E. Bourgeois, whose endeavors in the past have yielded a considerable number of new species as well as information pertaining to the ecology and distribution of previously described forms.

<sup>1</sup> Published by permission of the Secretary of the Smithsonian Institution. Received January 22, 1945.

The second lot was collected by Ing. A. R. V. Arellano and his students of the Instituto Politécnico de México. They were obtained in the limestone hills 10–30 km north-northeast of Cadereyta, Querétaro, at an elevation of about 2,100 meters.

**Genus *Holospira* Martens**

***Holospira teotitlana*, n. sp.**

Shell cylindroconic, varying in color from milk white to soiled white; aperture white. Nuclear whorls smooth. The postnuclear whorls are slightly rounded on the cylindric portion of the shell. The early postnuclear whorls are

marked by weak, closely spaced axial ribs, which become less well defined on the later turns where they are also a little more distantly spaced. On the last whorl they become heavier and even more distantly spaced. Base well rounded with a well-impressed umbilicus. Aperture subcircular with a slight angulation at the posterior angle. Peristome white and reflected. The columella is slender and hollow and bears a strong lamella on the middle in the penultimate turn, which is thick and rounded at its free edge. The parietal lamella is broad, concave on the outside, and slightly outward reflected. The basal lamella is less strongly developed than the parietal lamella and occupies the middle of the base. The labial lamella is poorly developed, consisting of a mere heavy thread. All three of these elements find their greatest expression in the penultimate turn, scarcely extending beyond this in either direction.

This species somewhat resembles *Holospira nelsoni* Pilsbry, from which it can be readily distinguished by its white aperture.

I am recognizing two subspecies.

*Holospira teotitlana teotitlana*, n. subsp.

Fig. 2

This subspecies differs from *Holospira teo-*

*tillana filia* in being smaller, more slender, and with the axial sculpture a little more pronounced.

The type, U.S.N.M. 431954, has 12.5 whorls and measures: Height, 17 mm; diameter, 5.5 mm. It and 27 additional specimens were collected by Miss Bourgeois under rocks of a small circular foothill at the foot of the higher sierra called Cerro Blanco or Cerro de Tizatepec at Teotitlán del Camino, Oaxaca. Seventeen topotypes are entered as U.S.N.M. 431955.

U.S.N.M. 431956 contains five specimens from a nearby locality, and five additional specimens from the same lot are in Miss Bourgeois's collection.

*Holospira teotitlana filia*, n. subsp.

Fig. 1

This subspecies is in every way larger than *Holospira teotitlana teotitlana*, with the axial sculpture less strongly pronounced.

The type, U.S.N.M. 431957, has 13.2 whorls and measures: Height, 19.4 mm; diameter, 6 mm. It and seven additional specimens were collected by Miss Bourgeois at the foot of another circular hill near the village of Ignacio Mejia, Cerro de Tizatepec, State of Oaxaca, which is 10 km distant from the type locality of *Holospira teotitlana teotitlana*. Four of seven

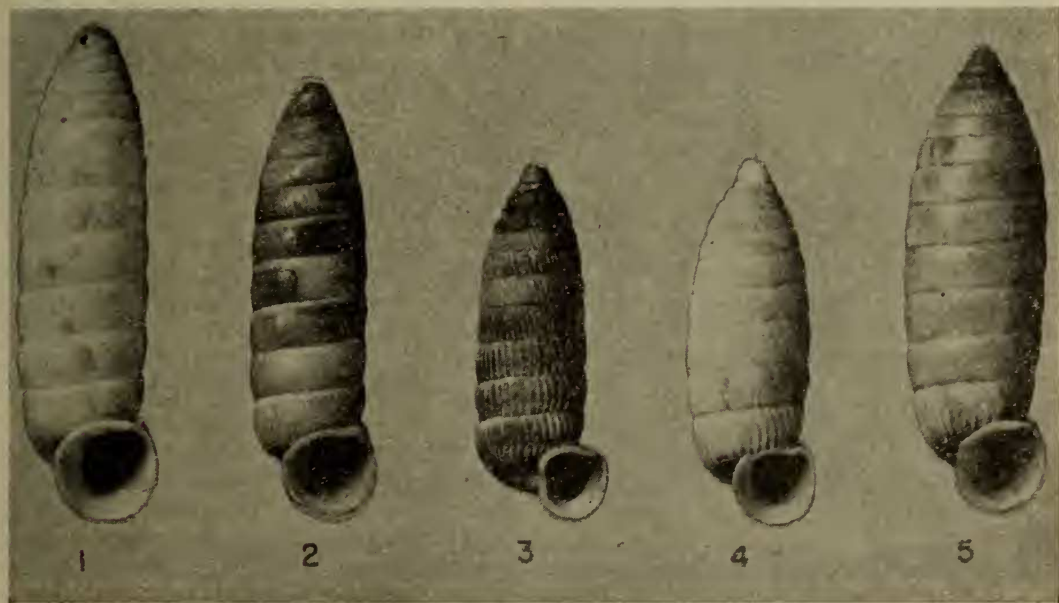


FIG. 1.—*Holospira teotitlana filia*. FIG. 2.—*Holospira t. teotitlana*. FIG. 3.—*Malinchea quere-taroensis*. FIG. 4.—*Malinchea politecnicae*. FIG. 5.—*Malinchea arellanoi*. (All  $\times 3\frac{1}{2}$ .)

specimens are entered as U.S.N.M. 431958; three are in Miss Bourgeois's collection.

**Malinchea**, new name

*Tristemma* Bartsch, Proc. U. S. Nat. Mus. 31: 133. 1906. (Not *Tristemma* Brandt, Prod. Anim. Mertens 1: 15. 1835.)

When I defined the genus *Tristemma* in 1906 I overlooked Brandt's previous use of this name. I am therefore rechristening the group as above.

**Malinchea arellanoi**, n. sp.

Fig. 5

Shell cyliandroconic, bluish white, marked with a few feeble rust spots; interior of aperture and peristome white. The nucleus forms a slightly bulbous apex, which consists of 2.2 well-rounded, smooth turns. The early post-nuclear whorls increase rapidly in size and are marked by well-developed, retractorily slanting axial ribs, which are about half as wide as the spaces that separate them. These ribs vary somewhat in strength and spacing. On the succeeding whorls the axial ribs rapidly become diminished and completely disappear on the cylindric portion of the shell. On the last 1.5 turns, however, they recur and become very strong and almost vertical. The whorls on the cylindric portion are almost flattened and separated by a slightly impressed suture. Base moderately long, openly umbilicated, and marked by the axial riblets. Aperture obliquely broadly oval, slightly angulated at the posterior angle of the aperture. Peristome expanded and reflected, free at the parietal wall. The columella is rather broad and hollow, and in the penultimate whorl it bears a well-developed median lamellar fold. A broad, somewhat concave fold subtends from the parietal wall, while another a little less strong is present on the middle of the base. There is no indication of a fold or thread on the inside of the outer lip.

The type, U.S.N.M. 431959, was collected by Ing. A. R. V. Arellano and his students on a limestone hill 10 to 30 km north-northeast of Cadereyta, Querétaro, Mexico. It has 14.4 whorls and measures: Height, 18.3 mm; diameter, 7 mm.

U.S.N.M. 431960 contains seven topotypes from the same source; three more are in the collection of the Instituto Politécnico de México.

**Malinchea politecnicae**, n. sp.

Fig. 4

Shell rather small, cyliandroconic, white with the peristome and the interior of the aperture yellowish white. The nucleus consists of about 2.2 whorls, which form a somewhat bulbous smooth apex. The early postnuclear whorls are marked by retractorily curved, strong, axial ribs, which are separated by spaces a little wider than the ribs. The middle whorls are almost flattened and marked by strong incremental lines amounting almost to ribs, while the last two turns bear very strong, almost vertical, curved axial ribs, which are not quite so wide as the spaces that separate them. The suture is slightly impressed. The base of the last turn is narrowly openly umbilicated and marked by the continuation of the axial ribs. The aperture is irregularly ovate, angulated at the posterior angle. The peristome is expanded and reflected, free, and elevated at the parietal wall. The columella is rather broad and bears a strong median fold in the penultimate turn. Here also on the parietal wall is a moderately broad, concave lamella, while the basal wall in the same region bears a less elevated lamella. There is no sign of a lamella or thread on the inside of the outer lip.

This species comes from another limestone block 10 to 30 km north-northeast of Cadereyta, Querétaro, Mexico.

The type, U.S.N.M. 431961 has 12.2 whorls and measures: Height, 14.6 mm; diameter, 6 mm.

U.S.N.M. 431962 contains 12 topotypes and some fragments from the same locality. Five additional specimens are in the collection of the Instituto Politécnico.

This species resembles *Malinchea arellanoi* but can readily be distinguished from it by its smaller size and stronger axial sculpture.

**Malinchea queretaroensis**, n. sp.

Fig. 3

Shell small, cyliandroconic, yellowish white, with the interior of the aperture and peristome pale yellowish white. The nucleus consists of 2.3 well-rounded, smooth turns which form a slightly bulbous apex. The early postnuclear whorls increase rapidly in size. These, as well as the rest of the whorls of the shell, are marked by strong, retractorily slanting axial ribs,



which are almost sublamellose. The spaces separating these ribs vary from twice to three times the width of the ribs. Suture moderately constricted. Base of the last whorl short, rather widely openly umbilicated and marked by the continuation of the axial ribs. Aperture subquadrate. Peristome expanded and reflected; that of the parietal wall free. Columella rather broad. In the penultimate turns this bears a moderately strong fold, which is anterior to the middle. The parietal fold is very broad and lamellose and extends in its widest portion

over more than half of the width of the whorls. The basal fold, on the other hand, is rather low when compared with the parietal fold. There is no indication of a fold or thread on the inside of the outer lip.

The type U.S.N.M. 431963, was collected by Ing. A. R. V. Arellano and his students on a limestone hill 10 to 30 km north-northeast of Cadereyta, Querétaro, Mexico. It has 13.5 whorls and measures: Height, 14.2 mm; diameter, 5.7 mm.

**ICHTHYOLOGY.**—*The discovery and redescription of the types of Rivulus marmoratus Poey, a cyprinodont fish from Cuba.*<sup>1</sup> LUIS RENÉ RIVAS, Museo de Historia Natural, Colegio de La Salle, Habana, Cuba. (Communicated by LEONARD P. SCHULTZ.)

While recently examining material of *Rivulus* in the United States National Museum, Dr. Leonard P. Schultz, curator of fishes, kindly called to my attention two specimens of Poey's, long ago labeled *Rivulus cylindraceus* Poey, and suggested that they were possibly a new species, since no fine-scaled *Rivulus* was recognized from Cuba by any current author. After careful examination of several facts and from circumstantial evidence, I am convinced that the two specimens are the types of *Rivulus marmoratus* Poey (1880: 248), and I submit the evidence below.

I wish to thank Dr. Schultz for calling these two specimens to my attention and am grateful for the opportunity to report on this Cuban fish, which has never been correctly diagnosed.

*Rivulus cylindraceus* Poey (1860: 308) was described first and is a coarse-scaled species that cannot be confused with the two fine-scaled specimens at hand. Furthermore, the types of *R. cylindraceus* are deposited in the Museum of Comparative Zoology; the holotype is a female bearing M.C.Z. No. 6423, a male paratype being in the same jar. There is another series of paratypes bearing M.C.Z. No. 6395 (see Luis Howell-Rivero, 1938: 176). I have examined these specimens and they agree with Poey's original description of *R. cylindraceus*. In addition, I have collected a fine series of topotypes

that agree perfectly with Poey's description. Thus I have concluded that there can be no doubt cast on the current diagnosis of this species.

Poey's original description of *Rivulus marmoratus*, translated into English, reads as follows: "I have in my possession two specimens which I believe I have received from Dr. Rafael Arango; and they are from Cuba, if they do not exist in the United States of America, whence Professor Gill has sent me some species of *Cyprinodontes*. The ocular blotch indicates that they are males; they are 55 millimeters long.

"It differs from the preceding species [*Rivulus cylindraceus* Poey] in the more posteriorly inserted dorsal, because its distance to the caudal extremity equals that of said dorsal to the opercle, which is why the anal appears more advanced. The body is covered with dark and light blotches. A black blotch is noticed above the base of the pectoral fin.—No. 774."

This description by Poey fits exactly the two specimens under consideration, even in regard to the total length of about 55 mm. It is concluded that to have two of Poey's specimens of *Rivulus* 55 mm. in length in the same jar from Cuba is also additional evidence and especially significant. I believe, therefore that they are the two specimens described as *Rivulus marmoratus* Poey, and I recognize them as the types of that species.

<sup>1</sup> Received November 1, 1944.